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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/384,108

08/27/1999

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02/08/2005

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EXAMINER

SHAH, CHIRAG G

ART UNIT

PAPER NUMBER

2664

DATE MAILED: 02/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s) OK	
	09/384,108	DOYLE ET AL.	
	Examiner	Art Unit	
	Chirag G Shah	2664	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-6,13,14,16 and 17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-6,13,14, 16 and 17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 2, 13 and 14 rejected under 35 U.S.C. 102(e) as being anticipated by Alexander (U.S. Patent No. 6,272,120).

Referring to claims 1 and 13, Alexander discloses in figures 1-3 of a communication for facilitating communication between a wired network [LAN 126 of figure 1] and wireless device [first and second wireless client bridge/access points of figure 1 and claim 1], the wireless devices including a first mobile wireless device [first client bridge/access point figure 1 and claim 1] and a second mobile wireless device [second client bridge/access point figure 1, claim 1 and as disclosed in col. 5, lines 61 to col. 6, lines 12], the first wireless device being configured for communication using a first communication protocol [Frequency Hopping as disclosed in col. 5, lines 23-60 and abstract], the second wireless device being configured for communication using with a second communication protocol [Direct Sequence-PN codes as disclosed in col. 5, lines 23-60 and abstract] different from the first communication protocol, the method comprising the steps of:

at a communication device [Multi-radio bridge 100 of figure 1], receiving data from the wired network [LAN 126 of figure 1] for reception by one of the mobile wireless devices [first

Art Unit: 2664

client bridge/access point of figure 1], the communication device including a first radio [operating at different FH sequence as in the abstract and claims 1&5] configured with the first communication protocol [FH as disclosed in col. 5, lines 23-60 and in claim 5] for communication with the first mobile wireless device [first client bridge/access point of figure 1], and a second radio [operating in DS as disclosed in col. 5, lines 23-60 and in claims 1&6] configured with the second communication protocol [DS as in claim 6] for communication with the second mobile wireless device [second client bridge/access point of figure 1]; and

Alexander further discloses in column 10, lines 41 to column 11, line 9 of

Controlling [multi-radio bridge 100 controls the traffic] data traffic in (system 120) between the wired network (126) and the wireless devices (162, 170, 176 etc...), the data controlling step comprising the steps of:

(i) to receive from the wired network data intended for reception by one of the mobile wireless devices [as discloses in col. 10, lines 41-49 that when a device 140 desires to communicate with Device 162, it must send a packet 200 to the multi-radio bridge (communications controlling device)],

(ii) to select one of the radios the one radio being configured for communication with the one mobile wireless devices [as further disclosed in col. 10, lines 41 to col. 11, lines 9, the multi-radio bridge processor will first read the source address field 208 and the destination address field 214 of the packet and then place the entire packet 200 in the data field of a shell packet. The multi-radio initiates a broadcast to all client bridges 166 via all of its radios 250, upon receiving an acknowledgement response from the client-bridge 166 of the destination device, the multi-radio bridge can learn the route and

Art Unit: 2664

forward the packet to the acknowledged client bridge using the (one selected) radio that is associated with the client-bridge]

(iii) to route all the received data to the radio associated with the one mobile wireless device [as disclosed in col. 10, lines 41 to col. 11, lines 9, once the multi-bridge processor learns of the destination route via a received acknowledgment, the multi radio bridge processor routes the packet to the radio associated with the destination mobile device address from now and in the future] as claims.

Referring to claims 2 and 14, Alexander discloses in column 10, lines 44-54 and in figures 1 and 2 wherein

the wireless devices are each assigned a respective address [as disclosed in col. 10, lines 44-54 and in figure 2, since the multi-radio bridge 100 reads the source address field 208 and destination address 214 in order to route the packet], and the received data includes the address of the respective mobile wireless device [as disclosed in col. 10, lines 44-54 and in figure 2, when the multi-radio bridge 100 receives that a device 140 desires to communicate with device 162, the packet 200 includes both a source address and the respective mobile wireless device's destination address]; and

the data controller is configured to route the received data to the respective radio in accordance with the address included in the received data [as disclosed in col. 10, lines 41 to col. 11, lines 9, once the multi-bridge processor learns of the destination route via a received acknowledgment, the multi radio bridge processor routes the packet to the radio associated with the destination mobile device address from now and in the future] as claim.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4, 5, 16 and 17, rejected under 35 U.S.C. 103(a) as being unpatentable over Alexander (U.S. Patent No. 6,272,120) in view of Cheston et al. (U.S. Patent No. 6,405,259).

Referring to claims 4 and 16, Alexander teaches in figure 2, that information is transmitted between various devices in the communication system preferably in the form of packets using Spread Spectrum wireless communication techniques, indicating that when the multi-radio bridge 100 receives a packet with a Spread Spectrum wireless protocol. Alexander, however fails to explicitly disclose wherein the received data includes wireless protocol information which indicates a wireless protocol used for communicating the data, and the data controller is configured to route the received data to the respective radio in accordance with the communication protocol associated with the received data. Cheston teaches in the abstract of transmission of a network packet specifying a group identifier. Cheston discloses in col. 3, lines 3-44 and of transmitting a network packet to the network controller. The network packet includes the particular protocol type which the client utilizes. Cheston further discloses in figure 2 and in col. 3, lines 25-44 and col. 4, lines 21-45 of a PCI-ISA bridge controller which functions as a network controller having a filter that has been programmed to pass/route only selected

Art Unit: 2664

network packet with a particular protocol type and ignores all other packets in the particular radio having a different protocol type. Therefore, it would have been obvious to one of ordinary skills in the art at time of the invention was made to include packet identifying the protocol type as taught by Cheston into Alexander's invention in order to minimize delay and increasing efficiency of transferring packets based on protocol type.

Referring to claims 5 and 17, Alexander discloses in col. 5, lines 23 to col. 6, lines 23 wherein the first radio (may use FH, claim 50 has a first radio coverage area [see figure 1], and the second radio [may use DS of claim 6] has a second radio coverage area [see figure 2], and a size of the second radio coverage area is different than a size of the first radio coverage area [configuration with respect to the size of the radio coverage area may vary based on configuration parameters as disclosed in col. 6, lines 3-23] as claims.

5. Claim 6 rejected under 35 U.S.C. 103(a) as being unpatentable over Alexander in view of Cheston as applied to claims 4, 5, 16 and 17 above, and further in view of Warren et al (U.S. Patent No. 5,912,921)

Referring to claim 6, Alexander discloses in figure 2 and in claim 6 of the wireless radio utilizing Direct Sequence Spread Spectrum Protocol. Alexander in view of Cheston fails to explicitly disclose wherein one of the communications protocols is in accordance with the IEEE 802.11 specification. Warren discloses in col. 1, lines 28-42 and col. 7, lines 44-52 of utilizing a DS channel reservation mechanism as that defined by the IEEE 802.11 standard. Thus, the DSSS is one of the communications protocol in accordance to IEEE 802.11 standard. Therefore,

Art Unit: 2664

it would have been obvious to one having ordinary skills in the art at the time the invention was made to include the teaching of IEEE 802.11 standard for one of the radio devices as taught by Warren into Alexander in view of Cheston's invention in order to provide standard of specification and compatibility parameter ensure the highest throughput.

Response to Arguments

6. Examiner accepts Applicant's decision to cancel claims 3, 7-12, 15 and 18-20.
7. Applicant's arguments with respect to claims 1, 2, 4, 6, 13, 14, 16 and 17 have been considered but are moot in view of the new ground(s) of rejection.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

Or faxed to:

(703)305-3988, (for formal communications intended for entry)

Or:

(703)305-3988 (for informal or draft communications, please label "Proposed" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2021 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chirag G Shah whose telephone number is 571-272-3144. The examiner can normally be reached on M-F 6:45 to 4:15, 2nd Friday off.

Art Unit: 2664

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 571-272-3134. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cgs
January 4, 2005


Ajit Patel
Primary Examiner